Remarks

Claims 1-60 are pending. By this Amendment, claims 2, 3, 5, 7, 13-47, and 52 are canceled, and claims 1, 4, 6, 8, 10, 48, 50, 56, and 58 are amended. Following entry of this Amendment, twenty (20) claims will be pending (claims 1, 4, 6, 8-12, 48-51, and 53-60) of which three (3) are independent (claims 1, 48, and 56). No new matter will be incorporated into the present application by entry of this Amendment. If the Office determines that any additional fees are deemed to be necessary with the filing of this Amendment, then the Office is authorized and requested to charge such fees to Deposit Account No. 061910.

Applicant's representative would like to thank Examiner Phi D A for extending him the courtesy of a personal interview on 28 October 2003 to discuss this case. This Amendment is being filed together with a recordation of the substance of the interview in accordance with MPEP 713.04.

In the Office Action mailed 9 May 2003, the Examiner rejected claims 14, 17, 22, 31, 34, 40, 48, 50, and 56 under 35 U.S.C. 112 as being indefinite; rejected claims 56-60 under 35 U.S.C. 112 as being indefinite; rejected claims 13-15, 17-18, 21-23, 34-35, 38-41, 44-45, 48-51, and 53 under 35 U.S.C. 102(b) as being anticipated by Smith et al. (U.S. Patent 5,735,089); rejected claims 1-7 and 12 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. et al. (U.S. Patent 5,866,260) in view of Tachauer et al. (U.S. Patent Application Publication U.S. 2003/0070391A1); rejected claims 8-11 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. et al. in view of Tachauer et al. and further in view of Smith et al.; rejected claims 13-15, 17-18, 21-23, and 26-33 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. et al. in view of Smith et al.; rejected

claim 16 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. et al. in view of Smith et al. and further in view of Tachauer et al.; rejected claims 19-20, 24-25, 36-37, and 42-43 under 35 U.S.C. 103(a) as being obvious over Smith et al.; rejected claims 34-35, 38-41, 44-45, and 47 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. et al. in view of Smith et al.; rejected claim 46 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. et al. in view of Smith et al. and further in view of Tachauer et al.; rejected claims 48-51, 53, and 55 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. et al. in view of Smith et al.; rejected claim 52 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. et al. in view of Emmanuel (U.S. Patent 5,836,119); rejected claim 54 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. et al. in view of Smith et al. and further in view of Tachauer et al.; rejected claim 56 under 35 U.S.C. 103(a) as being obvious over Smith et al. in view of Emmanuel; and rejected claims 57-60 under 35 U.S.C. 103(a) as being obvious over Smith et al. in view of Emmanuel and further in view of Kupec et al. (U.S. Patent 2,672,122). Applicant respectfully traverses, and requests reconsideration of, each of these rejections.

This Amendment is being filed to expedite prosecution of the present case by pursuing prompt allowance of claims covering certain preferred embodiments. Applicant maintains that the original claims are patentably distinct over the cited prior art. The ensuing discussion, for example, highlights features that appear in the original claims and are patentably distinct from the cited art. Applicant reserves the right to pursue the original claims in further prosecution.

The Examiner rejected claims 14, 17, 22, 31, 34, 40, 48, 50, and 56 under 35 U.S.C. 112 as being indefinite due to the term "significantly". With respect to this

rejection of claims 14, 17, 22, 31, 34, and 40, the present Amendment cancels these claims and therefore this rejection of these claims is rendered moot. With respect to this rejection of claims 48, 50, and 56, this Amendment deletes the term "significantly" from each of these claims and therefore is believed to obviate this rejection of these claims.

The Examiner rejected claims 56-60 under 35 U.S.C. 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Office Action states: "Claim 56 lines 7-10 "the second...of the second pane...periphery of the second pane: is indefinite. The disclosure shows that the covering is disposed over the first pane (2A) as specifically shown in figures 7B-7C to part 20, and not to second pane (2B)." Applicant respectfully disagrees with this rejection, and submits that the existing claim language is definite. Applicant's specification expressly states, at page 32, lines 9-15:

"With reference to figure 7B, the glazing compound 70 is located between the frame 90 and the outer surface 14 of the first pane 2A, but not between the frame 90 and the outer surface of the second pane 2B. In figure 7B, masking material is provided only on the first pane 2A. However, in some cases, masking material may additionally, or alternatively, be provided on the second pane 2B. In such cases, it will be appreciated that the masking material can typically be pulled from between the frame shoulder 95S and the pane 2B without difficulty..." (italics added).

The foregoing expressly supports the claimed arrangement wherein masking material is on the outer surface of the second pane, and glazing compound is between the frame and the outer surface of the first pane but not between the frame and the outer surface of the second pane. In view of this support, Applicant respectfully requests withdrawal of this indefiniteness rejection.

The Examiner rejected claims 13-15, 17-18, 21-23, 34-35, 38-41, 44-45, 48-51, and 53 under 35 U.S.C. 102(b) as being anticipated by Smith et al. Applicant disagrees respectfully with the rejection of each of these claims and with the characterization of the Smith reference. Applicant requests reconsideration by the Examiner in view of the submitted amendment and/or the following remarks.

With respect to this rejection of claims 13-15, 17-18, 21-23, 34-35, 38-41, and 44-45, the present Amendment cancels these claims and therefore this rejection of these claims is rendered moot. With respect to this rejection of claims 48-51, the present Amendment focuses on several preferred features that are novel, and also non-obvious, over Smith or any combination of Smith and the other cited references.

It is well established that to sustain a rejection under 35 U.S.C. §102, a single prior art reference has to meet every limitation of the claimed invention. In re Paulson, 30 F.3d 1475, 31 USPQ 2d 1671 (Fed. Cir. 1994); Akzo N.V. v. U.S. International Trade Commission, 808 F.2d 1471, 1 USPQ 2d 1241 (Fed. Cir. 1986); Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 231 USPQ 81 (Fed. Cir. 1986). If an independent claim is non-obvious and novel, then any claim depending therefrom is non-obvious and novel because it contains all limitations of the independent claim plus a further limitation. Hartness International, Inc. v. Simplimatic Engineering Co., 819 F.2d 1100, 2 USPQ2d 1826 (Fed. Cir. 1987). Therefore, to sustain a rejection under 35 U.S.C. §102 in the present application, a single reference would have to teach each of the

limitations present in amended independent claim 21. The Smith reference does not satisfy this requirement.

The Smith reference shows a window assembly for use in mass transit windows (train windows, bus windows, etc.) where a panel 14 is secured against a windowpane 12. The panel 14 is intended to prevent vandals from breaking or otherwise damaging the glass windows 12 in a train or bus, for example. As a result, the panel 14 in Smith is formed of a material that is well suited for preventing vandalism, such as acrylic or polycarbonate. In more detail, Smith teaches a windowpane 12, a frame 20 surrounding the windowpane 12, a seal 15 between the windowpane 12 and the frame 20, and a protective panel 14 secured against the windowpane 12.

Applicant submits that even before entry of the present Amendment, claims 13-60 are novel and non-obvious over Smith. Original claims 13-60 involve masking material that is positioned to extend beneath a frame. The Examiner characterizes the seal 15 in Smith as being the frame 20. Smith, however, expressly identifies element 20 as being the frame (see e.g., col. 3, lines 32-34). Moreover, the Examiner characterizes the panel 14 in Smith as being masking material. While Applicant maintains that the panel 14 in Smith is not tantamount to the claimed masking material, the present Amendment specifies that the claimed masking material is a film.

The teachings of Smith make it very clear that any modification in which the panel is replaced with a film would not work. For example, a masking film could not be properly mounted in the manner shown by Smith. Such a film would not be properly supported by the seal assembly 15 taught in Smith. This can be appreciated quite plainly by referring to Figure 2 of Smith and the attendant teachings (see e.g., Smith column 4,

lines 15-17), wherein a spacing segment 50 is wedged between the panel 14 and the windowpane 12 in order to create an air gap between the panel and the windowpane. If a masking film were mounted in this manner, the film would simply sag down under its own weight. Therefore, Applicant submits that Smith teaches quite clearly against any modification or combination that would involve replacing the panel in Smith with a masking film. If a primary reference teaches against a proposed modification, then the proposed modification cannot be obvious. <u>U.S. v. Adams</u>, 383 U.S. 39, 148 U.S.P.Q. 479 (1966). Teaching away from the invention is a *per se* demonstration of a lack of prima facie obviousness.

The present case is replete with evidence that it would not be obvious to modify Smith by replacing its panel 14 with a film. For example, any modification of this nature would destroy the intended function of the Smith assembly. It is well established that any modification that destroys the intended function of the modified apparatus cannot be obvious. In re Gordon, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). A masking film would not be suitable for protecting against the vandalism for which the Smith system is designed. Smith teaches forming the panel 14 of materials like acrylic or polycarbonate, which historically has been used for the cockpit canopies on airplanes. This type of material would understandably be required for a panel that is designed to prevent vandals from breaking or otherwise damaging the glass windowpanes in trains and buses. To the contrary, a masking film simply would not be protective enough to use against this type of vandalism. Moreover, a masking film could simply be peeled off, and therefore could be easily removed by vandals. In view of the foregoing, Applicant

submits that any modification or combination that would involve replacing the panel in Smith with a masking film cannot fairly be considered as being obvious.

Thus, Applicant submits that amended claim 48 would define quite clearly over Smith and any combination of the other cited references even if only the masking film feature were specified by the present Amendment. This Amendment, however, focuses specifically on preferred embodiments wherein there is provided "a transparent pane and a frame to which the pane is mounted, wherein the frame receives an edge of the pane, and wherein the assembly includes glazing compound between the frame and the pane..." and wherein the masking film "... extends beneath a confronting surface of the frame but does not extend so far beneath the frame as to engage the glazing compound." Smith clearly does not teach such an arrangement. In Smith, the windowpane 12 is received in the frame 20 and the seal 15 is between the frame 20 and the pane 12. In Smith, however, the panel 14 (which the Examiner characterizes as being the claimed masking material) does not extend beneath the frame 20. Moreover, the very nature of the Smith assembly requires that the panel 20 be in direct contact with the seal 15 that is between the frame 20 and the pane 12. This is unlike the claimed arrangement where the masking material does not contact the glazing compound that is between the frame and the pane. In view of the foregoing, Applicant submits that amended independent claim 48, and each claim depending therefrom, defines very clearly over Smith and any combination of the other cited references.

Thus, Applicant requests reconsideration of the Examiner's rejection of claims 48-51, 53, and 55 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. in view of Smith, of the Examiners rejection of claim 52 under 35 U.S.C. 103(a) as being obvious

over Adams, Jr. in view of Emmanuel, and of the Examiner's rejection of claim 54 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. in view of Smith and further in view of Tachauer.

The foregoing arguments also apply to claims 56-60, which also have been amended to specify the preferred masking film feature. Furthermore, these claims focus on embodiments wherein the glazing compound is only positioned between the frame and one of the panes of an IG unit, and wherein the masking film is provided on the other pane (i.e., the pane not having glazing compound between it and the frame) and the masking film extends beneath the frame. These embodiments are particularly advantageous in that they allow the masking material to be extended further beneath the frame, so as to provide additional protection against contaminants reaching the surface of the masked pane. Accordingly, Applicant submits that these claims are patentable for the foregoing reasons, and also in their own right.

Thus, Applicant requests reconsideration of the Examiner's rejection of claim 56 under 35 U.S.C. 103(a) as being obvious over Smith in view of Emmanuel, and of the Examiner's rejection of claims 57-60 under 35 U.S.C. 103(a) as being obvious over Smith in view of Emmanuel and further in view of Kupec.

Pending claims 1-12 involve a transparent window pane covered with multiple strips of masking material. No novelty rejections have been made against these claims. Rather, the Examiner has rejected these claims as being obvious over Adams, Jr. in view of Tachauer, or as being obvious over Adams, Jr. in view of Tachauer and further in view of Smith. Applicant disagrees respectfully with the rejection of each of these claims and

with the characterization of these prior art references. Applicant requests reconsideration by the Examiner in view of the submitted amendment and/or the following remarks.

In proceedings before the United States Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. In re Fritch, 972 F. 2d 1260, 1265, 23 U.S.P.Q.2D (BNA) 1780, 1783 (Fed. Cir. 1992). The Examiner can satisfy this burden only by showing an objective teaching in the prior art or that knowledge generally available to one of ordinary skill the art would lead that individual to combine the relevant teachings of the references. Id. Combining prior art references without evidence of a suggestion, teaching, or motivation to combine simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability, the essence of hindsight. In re Dembiczak, 175 F.3d 994, 999, 50 U.S.P.Q.2D 1614, 1617 (Fed. Cir. 1999); <u>Interconnect Planning Corp. v. Feil, 774 F.2d</u> 1132, 1138, 227 U.S.P.Q. (BNA) 543, 547 (Fed. Cir. 1985). The best defense against the subtle but powerful attraction of a hindsight based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. <u>In re Dembiczak</u>, 175 F.3d 994, 999, 50 U.S.P.Q.2D (BNA) 1614, 1617 (Fed. Cir. 1999). There is no basis for concluding that an invention would have been obvious solely because it is a combination of elements that were known in the art at the time of the invention. Fromson v. Advance Offset Plate, Inc., 755 F.2d 1549, 1556, 225 U.S.P.Q. (BNA) 26, 31 (Fed. Cir. 1985). Further, broad conclusory statements regarding the teachings of multiple references, standing alone, are not evidence. McElmurry v. Arkansas Power & Light Co., 995 F.2d 1576, 1578, 27 U.S.P.Q.2D (BNA) 1129, 1131 (Fed. Cir. 1993). Rather, the showing of a motivation to combine must be

clear and particular, and it must be supported by actual evidence. <u>In re Dembiczak</u>, 175 F.3d 994, 999, 50 U.S.P.Q.2D (BNA) 1614, 1617 (Fed. Cir. 1999); <u>C.R. Bard</u>, 157 F.3d 1340, 1352, 48 U.S.P.Q.2D (BNA) 1129, 1131 (Fed. Cir. 1993).

The Examiner has not established a prima facie case of obviousness for original claims 1-12. These claims require a transparent pane that is adapted to be mounted in a frame and that has a protective covering over a major portion of a first surface of the transparent pane, wherein the protective covering comprises multiple strips of masking material. The Examiner cites Adams, Jr. as the primary reference here. Adams, Jr. teaches a window pane that is covered with a single piece of masking material positioned to extend just to the inside edges of the frame in which the pane is installed. The Examiner acknowledges that Adams, Jr. does not show a transparent pane covered with a plurality of masking strips. The Examiner resorts to Tachauer as a secondary reference. Tachauer teaches methods for attaching the roofing and siding of buildings and other large membranes using a combination of hook and loop fasteners, staples, nails, and permanent adhesive. Applicant submits that no motivation can be fairly said to exist for combining these two fundamentally different references.

The Examiner states: "It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Adams Jr. et al to show the protective covering having a plurality of strips of masking material because it would allow for the covering of large surfaces without resorting to one large piece of covering as taught by Tachauer et al, and thus resulting in cost saving per easy covering of the pane." (italics added). Applicant submits that this statement fails to provide a clear and particular showing of any motivation to combine these two references. Further, Applicant submits,

after a careful reading of these references, that this statement is not supported by any actual evidence on the record. Tachauer does disclose roofing systems and other large membranes wherein shingles and other membranes are permanently attached in an overlapping manner. However, there is nothing to suggest the desirability of adopting such an overlapping pattern for covering windows with temporary masking film.

Both Adams, Jr. and the Applicant are concerned with masking windows, so it is difficult to see any motivation to combine based on a need "for covering large surfaces without resorting to one large piece of covering". The Examiner seems to connote that somewhere in Tachauer there is found a suggestion that covering windows with multiple strips of masking film would save money and be easier to carry out than covering a window with a single sheet of masking film. It is apparent, however, that the Examiner has failed to provide any evidence supporting this connotation. Moreover, this connotation is conclusory and simply is not supported by the facts of this case. If anything, Applicant submits that it is *more costly* and *more difficult* from a process standpoint to mask windows effectively by applying multiple strips of masking film on each window. Applicant vigorously submits that no motivation can be fairly said to exist for combining these two disparate references.

Finally, Tachauer itself contains objective evidence that the proposed combination is not obvious. For example, Tachauer details a myriad of embodiments wherein roofing, siding, and a host of other large membranes are applied to a building. Yet nowhere in Tachauer is there any mention of how the invention might be applied to windows.

Moreover, Figure 14 of Tachauer actually illustrates a window in one of the walls of the building and yet there is no mention that the window could be covered in any way with

the hook and loop membrane system of the invention. Thus, the Applicant submits that the Examiner has failed to establish a prima facie case of obviousness with respect to original claims 1-12.

The Applicant considers that the failure to establish prima facie obviousness here is understandable given the fundamental differences between the Adams, Jr. and Tachauer references. The field of providing temporary masking for windows is disparate from the field of providing permanent roofing, siding, and other large membranes. For example, the problems associated with temporary window masking are quite different from those associated with roofing, siding, and other permanent membranes. Applicant's invention provides window masking that thoroughly covers the surface of a window and yet can be removed easily and completely from the window (e.g., by grasping one of the exposed lateral edges of the masking strips and peeling the protective covering off the window pane). First, it is noted that this problem is not solved by Adams, Jr., as the window pane there is neither thoroughly covered nor easy to remove. For example, the masking material on the window pane of Adams, Jr. extends right up to, or just short of, the inner edges of the frame in which the window pane is mounted. As a result, the peripheral regions of the masking film do not extend at all beneath the frame, as can be done with the Applicant's invention to provide extra protection against dripping paint, silicone vapors, and other contaminants. Moreover, when a single sheet of masking film comes all the way, or almost all the way, to the inner edges of frame, one has to try to catch his fingernail or a small tool on the very outer edges of the sheet of masking material to remove the film. Because the outer edges of the masking film are so close to the inner edges of the frame, however, removal is not particularly convenient. Tachauer,

of course, is not concerned with this removal problem whatsoever, as the roofing, siding, and other large membranes of Tachauer are of a more permanent nature.

Thus, Applicant submits that the fundamental differences between the fields of Adams, Jr. and Tachauer, as well as the considerably different problems with which these references are concerned, provide further evidence in the record that a person of ordinary skill in the art seeking to solve problems associated with temporary window masking would not reasonably be expected or motivated to look to the more permanent attachment systems of roofing, siding, and other large membranes. In order to rely on a reference as a basis for a rejection of the applicant's invention, the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. See In re Oetiker, 977 F.2d 1443, 1447 24 U.S.P.Q.2D (BNA) 1443, 1447 (Fed. Cir. 1992) (here, the references on which the Board relied were improperly combined, as it was not shown that a person of ordinary skill, seeking to solve a problem of fastening a hose clamp, would reasonably be expected or motivated to look to hook and eye fasteners for garments).

In accordance with the foregoing, Applicant submits that original claim 1, and each claim depending therefrom, defines patentably over the cited prior art. The present Amendment, however, focuses specifically on preferred embodiments wherein there is provided: "A transparent window pane...having a removable protective covering disposed over all of said first surface except an unmasked peripheral apron, the protective covering having readily accessible means for removing the protective covering from the window pane, the protective covering comprising a plurality of strips of masking material, wherein the masking material is a masking film that is transparent or

translucent, wherein the strips of transparent or translucent masking film are disposed in a sequentially overlapping fashion with each subsequent strip overlapping a portion of a preceding strip, such that the overlapped strips of transparent or translucent masking film define a plurality of exposed lateral edges that form said readily accessible means for removing the protective covering from the window pane, wherein the overlapped strips are affixed to one another, and wherein the overlapped strips are affixed to one another by being adhesively joined.

These preferred embodiments include numerous features that are neither taught nor suggested by Adams, Jr., Tachauer, Smith, Emmanuel, Kupec, or any combination thereof. For example, in these embodiments the protective covering has readily accessible means for removing the protective covering from the window pane. None of the embodiments in Tachauer provide any readily accessible means for removing the protective covering. Even in embodiments of Tachauer where a top layer could be peeled away, there would be no means for removing the rest of the protective covering. Rather, part of the protective covering would remain (e.g., at least one layer of hook or loop fasteners that would remain). This can be seen, for example, in Figures 3A, 3B, 4A, and 4 of Tachauer, wherein the bottom layer of hooks is either stapled or nailed to the roof, bonded to the roof, or made to be an integral part of the roof. It is desirable, of course, for these layers in Tachauer to be attached to the roof quite permanently.

Further, in these preferred embodiments the overlapped strips of transparent or translucent masking film are affixed to one another, and these overlapped strips are affixed to one another by being adhesively joined. These features provide very desirable advantages. For example, removal of the protective covering can be facilitated by

adhesively joining the overlapped strip, as the whole protective covering can thus be made to be removable by simply pulling on one strip, as explained in Applicant's specification at page 17, lines 16-20. Moreover, adhering the overlapped masking strips together adhesively protects the glass against silicone vapors that could otherwise find their way between the overlapped strips (as would occur where overlapped pieces of material are affixed to each other by hook and loop fasteners, as in Tachauer) and onto the panes, as explained in Applicant's specification at page 11, line 14 through page 12, line 12). Even in Figure 3A of Tachauer, which depicts adhesive 113 for bonding the hook layer 100 to the roof, the adhesive is not extended to the overlapped portions of the shingles. Rather, all of the sequentially overlapped strips in Tachauer are joined together by hook and loop fasteners. Thus, Applicant submits that the preferred embodiments of amended claim 1 provide numerous features that are both novel and inventive over Adams, Jr., Tachauer, Smith, Emmanuel, Kupec, or any combination thereof.

The Examiner rejected claims 13-15, 17-18, 21-23, and 26-33 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. et al. in view of Smith et al. The present Amendment cancels these claims and therefore this rejection is rendered moot.

The Examiner rejected claim 16 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. et al. in view of Smith et al. and further in view of Tachauer et al. The present Amendment cancels this claim and therefore this rejection is rendered moot.

The Examiner rejected claims 19-20, 24-25, 36-37, and 42-43 under 35 U.S.C. 103(a) as being obvious over Smith et al. The present Amendment cancels these claims and therefore this rejection is rendered moot.

The Examiner rejected claim 46 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. et al. in view of Smith et al. and further in view of Tachauer et al. The present Amendment cancels this claim and therefore this rejection is rendered moot.

The Examiner rejected claims 34-35, 38-41, 44-45, and 47 under 35 U.S.C. 103(a) as being obvious over Adams, Jr. et al. in view of Smith et al. The present Amendment cancels these claims and therefore this rejection is rendered moot.

Applicant submits that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested. The Examiner is invited to call the undersigned to discuss any questions or suggestions he may have on this application.

Respectfully submitted,

Dated: 10 November 2003

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